

1. A device for generating decision support for decisions which determine and/or control the behavior of an entity, comprising:

a supervising unit arranged to handle a rule system for the behavior, wherein the supervising unit comprises at least one storage member in which a set of rules for the behavior is stored,

a user interface including first means for presenting information to a user of the device and second means for inputting instructions to said supervising unit,

the device being operable with a first automatic rule handler which automatically executes said rules according to a predetermined program for the rule handling,

the device being operable with a second rule handler which enables a user, by instructions via said second means, to indicate an alternative to the automatic execution by the first rule handler, such that the second rule handler is activated and executes the rules in accordance with said instructions from the user at the same time that the first rule handler continues the automatic execution, the device being further operable such that said first means at the same time is able to present information concerning the rule handling which is carried out by the first rule handler and the rule handling which is carried out by the second rule handler.

2. A device according to claim 1, wherein the rule system is divided into a plurality of states for different parts of said behavior, and wherein each state includes at least one of said rules.

5 3. A device according to claim 2, wherein the rule system is divided into a plurality of rule blocks, each of which includes at least one rule, wherein each state includes at least one block, wherein the rules within a certain rule block relate to a certain aspect of the behavior within the corresponding state.

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4. A device according to claim 2, wherein names which identify said states, rule blocks and/or rules, automatically or in response to a command entered via said second means, are presented to a user with said
15 first means.

5. A device according to claim 4, further comprising means, associated with said first means, for presenting a plurality of names which concern different states, wherein the name of the state in which said first
20 rule handler exists, is marked with a first kind of marking.

6. A device according to claim 5, wherein when the second rule handler is activated by instructions from a user, the name of the state in
25 which said second rule handler exists, is marked with a second, different

kind of marking, wherein both the first and second markings are capable of being simultaneously presented by said first means.

7. A device according to claim 2, wherein said first means provides a
5 decision support window which includes at least one area which represents a state, wherein the area includes names which identify at least different rules which form part of the state.

8. A device according to claim 7, wherein said area includes at least
10 names of a plurality of rules, wherein the name of the rule or rules which are activated for the moment according to at least one of said first and second rule handler are provided with markings which indicate that the rule or the rules in question are activated.

15 9. A device according to claim 8, wherein when the second rule handler is activated by instructions from a user, the name of the rule or rules which are activated according to said first rule handler is marked with a first kind of marking, while the rule or rules which are activated according to said second rule handler are marked with a second, different kind of
20 marking.

10. A device according to claim 7, wherein said area also includes the name of at least one block which forms part of the state.

11. A device according to claim 1, further comprising means, operable in response to a command via said second means, for deactivating the second rule handler.
- 5 12. A device according to claim 7, wherein said second means includes means for naming at least different rules, the names of the rules which have been named by the user, and which form part of a certain state, being automatically shown within said area, when said area which represents the state in question is shown in said decision support win-
10 dow.
13. A device according to claim 7, wherein said plurality of states are organized in at least one of a network and a hierarchy of states, wherein the device further includes means for allowing a user to modify the states
15 by performing at least one of the activities which include naming states, adding states, removing states, and changing the position of the states in the network or hierarchy, wherein when said decision support window is shown, a plurality of states are automatically shown, and wherein the states are automatically shown in accordance with the modifications of
20 the states which the user has carried out.
14. A device according to claim 1, wherein the rule system is divided into at least one of a plurality of states and rule blocks for different parts of said behavior, the device further includes means, operable in re-
25 sponse to an advance user command via said second means for defining

that, for a certain state or a plurality of states and/or rule blocks, the rules which form part of the state and/or the rule block shall not be activated automatically, whereby the behavior of the entity in these states and/or rule blocks is always handled manually.

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15. A device according to claim 1, wherein one of the rules includes at least one predetermined and pre-programmed premises which can either be true or false and at least one predetermined and pre-programmed conclusions, wherein each premise in the rule is assigned an indicator
10 which can indicate three different conditions, including a first condition that the premise shall be true, a second condition that the premise shall be false and a third condition that it does not matter whether the premise is true or false, wherein at least one conclusion is carried out if all of said premises fulfill the conditions set by the assigned indicators.

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16. A device according to claim 15, wherein each conclusion in the rule is assigned an indicator which can indicate two different cases, a first case which indicates that the conclusion shall be carried out and a second case which indicates that the conclusion shall not be carried out,
20 wherein a conclusion is carried out if all of said premises in the rule fulfill the conditions set by the assigned indicators and the indicator of the conclusion indicates said first case.

17. A device according to claim 15, including means, operable on
25 commend from a user, for showing at least one of said rules with said

user interface, and further comprising means, operable by a user with the help of said second means of the user interface, for changing the indications of said indicators.

- 5 18. A device according to claim 17, further comprising means for changing said indications, the changing means requiring user operation of at least one depressions of at least one of a key and a button.
- 10 19. A device according to claim 15, wherein at least some of said premises and conclusions comprise at least one parameters which can be modified, wherein in response to a command from a user via said user interface the device presents a parameter window which shows at least one premise or conclusions and wherein the user using said user interface can modify the parameter or the parameters in said premises or
- 15 conclusion.
- 20 20. A device according to claim 1, wherein the rule system is divided into a plurality of states, wherein each state comprises a plurality of said rules, which are divided into at least one rule blocks which concern different aspects of the state, wherein the rule or rules which form part of a certain rule block on command from a user via said user interface is shown as a rule block window.

21. A device according to claim 20, wherein in said rule block window are shown all premises and conclusions which form part of the different rules which form part of the rule block, wherein for each rule in the rule block said indications which indicate said conditions and cases are
5 shown as indicators for the respective premises and conclusions.

22. A storage medium for storing a computer program, wherein the storage medium carries a computer program which is such that when it is implemented in a supervising unit connected to a user interface, the
10 computer program providing

- a first automatic rule handler which automatically executes rules according to a predetermined program for rule handling, and
- a second rule handler which enables a user, by instructions via said second means, to indicate an alternative to the automatic execution
15 by the first rule handler such that the second rule handler is activated and executes the rules in accordance with said instructions from the user at the same time that the first rule handler continues the automatic execution, wherein the first means at the same time is able to present information concerning the rule handling which is carried out by the first rule
20 handler and the rule handling which is carried out by the second rule handler.

23. A device according to claim 1, wherein said entity is selected from the group consisting of a technical apparatus, a technical process or a technical system.

5 24. A device according to claim 23, wherein said technical apparatus, technical process and technical system constitutes a vehicle.

25. A device according to claim 23, wherein said technical apparatus, technical process or technical system constitutes an unmanned or
10 manned aircraft.

26. A device according to claim 23, wherein said device includes means, by the execution of said rules, for automatically controlling at least a part of the behavior of said entity.

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27. A system comprising:

an entity;

a device for controlling the behavior of the entity, the device including

20 a first automatic rule handler which automatically executes rules according to a predetermined program for the rule handling;

a second rule handler which enables a user, by instructions via said second means, to indicate an alternative to the automatic execution by the first rule handler, such that the second rule handler is activated

and executes the rules in accordance with said instructions from the user at the same time that the first rule handler continues the automatic execution, said first means at the same time is able to present information concerning the rule handling which is carried out by the first rule handler
5 and the rule handling which is carried out by the second rule handler.

28. A system according to claim 27, wherein when said second rule handler is activated, said entity is controlled by this second rule handler, wherein when the second rule handler is deactivated, the control of the
10 entity returns to the first rule handler.

29. A system according to claim 27, wherein said entity is a manned or unmanned aircraft.

15 30. A system according to claim 29, further comprising a storage medium for storing a computer program, wherein the storage medium carries a computer program which is such that when it is implemented in the supervising unit and the supervising unit is connected to the user interface the behavior of the entity is controlled.